Manitoba Medical Review

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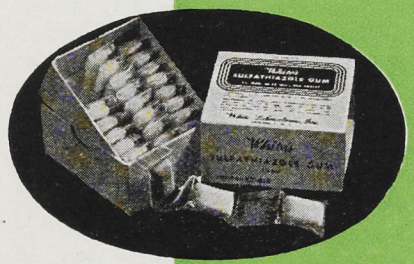

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The Manitoba Medical Review

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Chronic Cystic Mastitis

By Marjorie R. Bennett, M.D.

Chronic cystic mastitis is the term applied to a group of benign conditions in the breast which are neither inflammatory nor truly neoplastic. Geschickter recognizes three forms of this disease:

1. Mastodynia, or painful breasts, where the mammary tissue is painful and of increased density.

2. Adenosis, where nodosities result from epithelial hyperplasia.

3. Cystic disease, where cysts have resulted from secretory changes.

Mastodynia

Persistent pain, exacerbated in the premenstruum and referred to an indurated region of the breast which is tender to palpation, is relatively common. The tender tissue may be confined to a single sector of one breast, or both glands may be tender and granular when examined. The pain of mastodynia is gradual in onset over a period of months or years. There is a tendency to sterility, intentional or otherwise, in married women with this condition, and those who bear children are frequently unable to nurse them. Mastodynia is extremely rare in women with large families. The menstrual periods tend to be closer together than normal. The average age is approximately thirty-five years. Usually, mammary pain and tenderness are at first mild and premenstrual, becoming more severe and prolonged, finally lasting practically throughout the entire cycle. The pain is sufficient in some cases to keep the patient awake at night, and may radiate down the arm or over the shoulder to the scapular region on the affected side. About half of these patients notice a lump or a swelling. The swelling frequently varies in size, and is larger before and smaller after the periods. Sometimes the lump and symptoms disappear for months and then return. On examination, swollen tender tissue is palpated which has increased thickness, density or hardness. Although one or more margins of the tender tissue may be felt as a distinct disc-shaped mass, demarcation from the surrounding breast is usually absent. The upper outer quadrant is most frequently affected. In addition to tender dense tissue, indefinite nodularity may be palpated. These areas are coarsely granular and do not contain the definite nodules found in adenosis. Mastodynia must be differentiated from pain referred to the breast from soreness in the pectoral muscles following exertion, arthritic and neuritic pains referred along the costal nerves, from the pain in heavy obese breasts and from pain at the site of a bruise, former abscess or scar. In these conditions the pain does not have the characteristic exacerbation in the premenstruum and is not localized in a dense granular tender zone. Fluctuation in size or sensitivity of the tender tissue during the menstrual cycle is not a reliable means of differentiating the mass from cancer unless complete disappearance is recorded at one or more examinations. Mammary pain and tenderness usually disappear spontaneously after a period of months or years, the condition sometimes persisting for ten or more years. In some patients who have been single it is improved with marriage, and in all it disappears during pregnancy. In cases of long duration the trouble is usually terminated by the menopause but may persist a year or two beyond.

Adenosis or Schimmelbusch's Disease

This type is characterized by multiple nodules varying from a millimetre to a centimetre in size, usually distributed about the periphery of the upper or outer hemisphere. The breasts are small, dense and edged like a saucer. The patient complains of pain and tenderness and/or a lump. Exacerbation of pain in the premenstruum, and disappearance and recurrence of the lump are common findings. Low fertility is common among women with adenosis, and the average age is five years beyond that of mastodynia. Menstruation is often irregular. It is possible that many cases of adenosis are late manifestations of mastodynia. In the majority of cases both breasts are affected. Adenosis is the most chronic and the most severe form of chronic cystic mastitis. The differentiation of adenosis from benign intracystic papilloma and from cancer may require biopsy. Frequent bilateral involvement in adenosis aids in the diagnosis. Adenosis usually runs its entire clinical course within a period of ten years. If pregnancy supervenes, nodularity and tenderness disappear after mid-term and the breast continues normal to palpation a year or more after parturition.

Cystic Disease

One or more cysts, a centimetre or more in diameter, appear abruptly in the breasts at or near the menopause. The cyst contains serous or cloudy fluid and presents a thin blue dome at operation. The majority of women with cystic disease are childless. Most have only a single cyst. The presence of the lump may be accompanied by mild pain, burning or pricking. Vari-

ation in the size of the cyst occurs, and occasionally it disappears spontaneously. The upper and outer quadrant of the breast is most often affected. Where multiple cysts are present they are distinguished from adenosis by their large size and fewer number. Trans-illumination and aspiration will usually differentiate cystic disease from other conditions of the breast. Spontaneous regression is the rule during pregnancy.

Evidence has been accumulating for some years that chronic cystic mastitis results from abnormalities in the secretion of ovarian hormones. It is practically confined to cyclic women. All forms of the disease show distorted lobules. Mastodynia shows suppression of lobules, adenosis shows hyperplastic lobules and cystic disease shows dilated lobules. It is not found in the male breast, or in adolescence, where lobules are absent, or in pregnancy, where the stimulus to normal lobule formation is most intense. Irregularity of the menstrual cycle is common in patients with chronic mastitis. Urinary assays of estrogen and pregnandiol, and the results of animal experimentation, suggest that the pathological changes of mastodynia and adenosis result from an imbalanced ovarian function in which varying intensities of estrogenic stimulation are improperly balanced by low or deficient outputs of luteal hormone. Cystic disease is apparently the result of high estrogenic stimulation partially or totally unopposed by corpus luteum function. All forms of chronic mastitis can be reproduced in the rat by varying the endocrine control. Mastodynia followed by adenosis may be produced experimentally by estrogen stimulation alone, using moderate doses over a prolonged period. These changes are more readily produced by combining estrogenic and luteal stimulation in ratios in which the estrogen factor exceeds the luteal factor. If this excess of estrogen is too great, cyst formation also occurs.

Treatment has varied from simple reassurance to mastectomy. Bloodgood stated that if the patient with mastodynia were reassured against the possibilities of cancer, she tolerated the discomfort well. Excision of painful breast tissue is not a cure unless bilateral mastectomy is done. This is very radical treatment for a benign condition, yet the fact that it has been employed indicates that not all women can or will tolerate discomfort or pain or recurrent nagging worry about cancer. Endocrine therapy seemed a logical form of attack, and estrogen injections were first tried when it was believed there was an ovarian deficiency. The success of this treatment we believe now to be due to the stimulating effect on the corpus luteum of small doses of estrogen. Then it was recognized that hyperestrinism was responsible and testosterone and corpus luteum were used. Favorable results are obtained with both of these hormones, but corpus luteum therapy is to be preferred because clinically effective doses of testosterone produce masculinizing effects.

In April, 1943, Morton Biskind reported observations on twenty-nine patients in whom a distinct correlation was found between symptoms of hyperestrinism and signs of B avitaminosis. Treatment of Vitamin B Complex gave prompt and often dramatic improvement in such gynecological complaints as menorrhagia, metrorrhagia, chronic mastitis, and premenstrual tension. The signs of nutritional deficiency which he found commonly associated with the above symptoms were glossitis, cheilosis, stomatitis, peripheral neuritis, nervousness and fatigue, and acne. The modern normal diet is generally deficient with regard to the B vitamins. G. R. Biskind had previously shown that the liver loses its ability to inactivate estrogen in Vitamin B Complex deficiency, while testosterone and corpus luteum hormone are inactivated even in the absence of Vitamin B from the diet. When a pellet of estrone or an ovary is implanted in the spleen of a castrate female rat, the absorbed estrogen must pass first through the liver by the portal circulation. On a complete diet such an animal remains anestrous. On a Vitamin B Complex free diet it goes into continuous estrus. Brewer's yeast will restore the anestrous state. The flow of estrogen through the liver can be controlled at will, by withholding the B vitamins or by restoring them to the diet. Testosterone, which closely resembles progesterone chemically, is found by similar tests on a male rat to be inactivated by the liver regardless of dietary deficiencies. A further report was made in January, 1944, including a total of one hundred and four cases studied by M. S. Biskind, G. R. Biskind and L. H. Biskind, working separately. Their results with Vitamin B Complex therapy appeared to be so promising that Dr. R. O. Burrell and I decided to try this form of treatment for chronic cystic mastitis. Intramuscular or intravenous injections of Vitamin B Complex were given every two to four days, each injection providing:

10 mg. thiamin chloride, 4 mg. riboflavin, 10 mg. pyridoxine, 5 mg. calcium pantothenate, 150 mg. nicotinamide.

Patients received six to eight injections and an oral preparation of Vitamin B was prescribed, to be continued indefinitely. This treatment has been used in ten cases with prompt relief of pain in each. Where constant pain was complained of, relief occurred after the third injection. Premenstrual pain was relieved if three injections or more could be given before the next period. Disappearance of a lump in the breast occurred in three cases and in five more the definite nodularity disappeared and breast tissue became normal

to palpation. Three of the patients had relief of premenstrual tension, and in four who had menorrhagia, the periods became normal. Menstrual headaches were relieved in one, and nervousness and tiredness in another. We were impressed with the prompt relief of pain in each case. It is well known that reassurance will alleviate pain, either partially or completely. It has also been reported that placebos will cure pain, including painful breasts. But these measures will not affect pathology, and we have observed the change from nodular lumpy breasts to normal breast tissue in all but two of our cases.

Six have had recurrences, two three months after treatment, one four months after, one eight months after, one nine months after, and one ten months after. Symptoms were again relieved promptly when treatment was instituted. One who had a recurrence at three months took five more injections and was relieved this time for four months. Cases tabulated.

It seems to us, on the basis of this small experience, that Vitamin B Complex administered parenterally is an effective though not permanent treatment for chronic cystic mastitis. It is safer than estrogen, which is a known cancer stimulating hormone. It is safer than testosterone, which has a virilizing effect. It is possibly to be preferred to progesterone, because progesterone administration might theoretically depress corpus luteal function. It has the added advantage of giving the patient a feeling of general well-being, a logical result if, as Biskind claims, this disease is part of a deficiency state. Where accurate diagnosis is not possible, biopsy should be done to exclude cancer before treatment is instituted. At the present state of our knowledge of the disease it appears to be the best treatment next to pregnancy, which in some instances is also not a permanent cure.

Age	Marital Status	Children	Breast	Menstrual and other Disorders	Treatment	Result	Recurrence
37	W	1	Pain and nodularity.	Menorrhagia. Premenstrual tension.	Parenteral B Complex	Normal at 5 months.	9 months.
35	M	1	Left pain and bilateral nodularity.		"	No symptoms.	
20	S	....	Premenstrual pain and nodularity. Fibroadenoma excised.		"	Normal.	
41	S	....	Premenstrual pain. Lump and nodularity. Biopsy.	Menorrhagia and headaches. Premenstrual tension.	"	No pain or tenderness. Adenosis still palpable at 4 months.	10 months
43	W	1	Premenstrual pain. Bilateral adenosis. 2 cysts removed.		"	Normal at 6 months.	
33	S	....	Right pain and lump. Bilateral tenderness and nodularity.		"	Lump gone. Slight premenstrual tenderness. No pain.	3 months 4 months
33	M	....	Left pain and lump. Bilateral tenderness and nodularity.	Menorrhagia. Premenstrual tension. Nervous and tired.	"	Slight nodularity.	
25	M	1	Premenstrual pain and nodularity. Fibroadenoma removed.	Menorrhagia.	"	Returned in 3 months.	3 months
32	M	1	Bilateral pain and nodularity. Mass on left side.		"	Lump gone. Breasts normal.	8 months
35	M	....	Bilateral pain and nodularity.		"	Breasts normal.	4 months

Review of Trichomonis Vaginalis

By E. W. Stewart, M.D.

Trichomonis Vaginalis was first observed in vaginal secretions, by Donne, in 1837, and little attention was paid it until recent years. Its life history has never been determined.

It is an amoebic-like organism with flagella and is quite active when examined under the microscope.

It thrives in an alkaline medium (though strong alkaline or acid are detrimental) and is a very friendly and persistent little bug—friendly because it enjoys life with other bacteria and persistent because it is often difficult to cure.

Some gynocologists regard it as a harmless Protozoan Saprophite, and claim that the other organisms cause the symptoms. However vaginatis associated with severe Trichomonis Vaginatis is typical of this condition being unlike the vaginatis found in other types of infection.

The vaginatis disappears rapidly after the Trichomonis are reduced to only an occasional one in the vaginal secretion and increases rapidly when treatment is discontinued, with a like increase of the Trichomonis.

Trichomonis Vaginalis, whatever its origin, is a common and distressing complaint. True, there are little or no apparent complications, but it has a disturbing affect both mentally and physically on the patient. Mentally because it is depressing and their first thoughts are of Venereal Disease, and physically because any abnormal vaginal discharge is evidence of pathology and therefore unhealthful.

Few if any women care to have a vaginal discharge. It offends their sense of hygiene and cleanliness.

Authors vary in the incidence of Trichomonis. Some have found 30%, others as high as 60% of abnormal vaginal discharges contain Trichomonis. Probably 40% would be a safe estimate here, hence the complaint is common.

How Is It Transmitted?

This is also somewhat of a mystery and the generally accepted theory is by water and there is evidence that different parts of the country vary greatly in incidence.

Davis finds April and September the high months without explanation.

The numbers increase in late summer when the water is low and sluggish and the beaches crowded.

Here we find it more in people living in boarding houses and using a common bathtub.

However, it is not a respecter of persons and cases occur from the best of homes and in virgins as well as non-virgins.

Seldom, if ever, do we see a case before menstruation begins. Most obstetricians agree that 20% of pregnant women are affected and curiously enough 50% to 60% clear up after delivery.

There is a good deal of controversy as to whether Trichomonis Buccalis and Trichomonis Hominis are related to Trichomonis Vaginalis.

Recently Wienrich experimented with 50 women, installing both the buccal and intestinal in the vaginal track. Not one case of Trichomonis Vaginalis developed and he is inclined with other investigators to discount infection from the rectum.

In the resistant and recurring cases we have to consider other sources of reinfection, that is the bladder and urethra, skeenas ducts, bartholin glands, rectums and by the male.

Allan and Baum of Chicago found as high as 25% bladder infections and suggested more cooperation between the urologist and gynocologist.

Nearer home, Delamater and Scott, technologists at Ninette Sanitarium, give an interesting report on their investigation of Trichomonis. Routine exams of all patients admitted from 1938 to 1941 showed 12.6% had harbored or had Trichomonis. While out of 219 women in 1937-38 there were 13 or 5.9% who had Trichomonis Vaginalis in the urine. Of these, nine were unmarried and four married, the youngest being 15 and the oldest 51.

The urine was very acid in most of the urine specimens and an average of 13-14 pus cells accompanied the Trichonomads. They also found Trichomonis active in the urine after five to six hours.

Rural Incidence

There is very little in literature re incidence in rural parts of the country and I recently wrote or contacted 40 doctors in rural Manitoba covering the Province as a whole. Needless to say 100% did not reply but I had a good cross section of the Province from those who did and some replies are interesting.

Western Manitoba appeared to be comparatively free—a number of doctors stating two - three definite cases over a period of years. Southern Manitoba was free in spots with areas occasionally reporting a few. Northern and Eastern, especially in the lake areas, reported more. One doctor in the lake area, reported two out of five vaginal discharges were Trichomonis.

The Pas reported 14 cases in two years, two from outside. Enquiry from the doctor in charge of Indians in the same area, reported no cases in Indians except one in a halfbreed girl—and she was of the better class.

I could not get data on Indians living close to Winnipeg. It shows that the incidence varies in different parts of the country and explains the difference in percentage reported by different men.

Symptoms:

Clinical picture is typical and fairly uniform.

The patient complains of persistent discharge which causes itchiness and irritation both in the vagina and on the vulva.

The discharge usually profuse but may be less under douching and treatment. It is milky white or yellowish in color, frothy and thin with varying degrees of odor.

The appearance of vagina may be almost strawberry or there may be patches of red which bleed easily on swabbing. The whole more evident in the upper vagina.

Here a brief comparison might be in order between Trichomonis, G.C. and Monila or fungus infections.

Trichomonis

Origin — Indefinite. Frothy discharge, thin. Itchiness and irritating. No apparent urethritis. Not many apparent complications. Persistent.

G.C.

Origin — Specific. Yellow to green, thick. Irritating and painful. Urethritis. Many complications. Now fairly good.

Fungi or Monila

Origin—Specific. Tenacious, vary in color. Irritating to Pruritis. Occasional urethritis. Few complications. Gentian violet, specific.

Trichomonis has apparently little to do with associated cervical erosians, cervicitis or endocervicitis. On the other hand, G.C. and Fungi, especially G.C., cause them. Trichomonis can thrive also with the latter complaints.

To Confirm Diagnosis

In Trichomonis the hanging drop with or without saline solution, is used and quite simple.

A word here re the above. Most patients when going for a pelvic examination douche either the same day or the night before and you should be careful of negative swabs in the hanging drop examination as well as the appearance of vagina and amount of discharge. Centrifuging the specimen is easily done and if there are a few Trichomonis you will pick them up. We instruct patients not to douche for 48 hours before coming for an examination, either the first time or in the subsequent check-up. In that way the clinical picture is not materially changed. Most authors advise against even using lubricant on speculum when taking swab.

In 1943 we started a Trichomonis Clinic at St. Boniface Hospital, with the idea of doing some research work on chronic cases. While we were much concerned about treatment, we were more concerned with the recurring and cases that did not respond to any treatment.

While the number of cases are not large (65 O.P.D. and private) we learned some facts which I shall try and bring out, in the treatment.

Treatment

There is no specific treatment at present. When we delve into the various lines of treatment advocated, it reminds one of looking up the Pharmocopoeia on other chronic ailments. Each person has his favorite, with varied percentage of sure cures, but the report invariably ends up with this, "Of course there are a certain number of recurrences or resistant cases." Curiously enough it all works out to about 20% in any form of treatment.

We started out at the clinic using a fairly strong alkaline treatment, then using acid douches in between. This was one of the simple stomatic antiacids on the market.

The usual cleaning and drying of the vagina was done and the powder inserted into the vagina, either by insufflation or tongue blade. On the second night the patient was instructed to take a vinegar douche, three tablespoons to a quart of water and using the H.W.B. and nozzle, and continuing the douching daily until the next treatment.

In some cases the results were very good. One or two treatments were sufficient for a cure. However after six months in analyzing our results, we were also 20% unimproved or recurring.

We instructed a number of these as to washing after bowel movements. No change was noted. Five of the resistant cases were cystoscoped and three had a definite trygonitis, which improved when bladder was cleared up. Two were definitely from male reinfection. In 1944, Roth found 27.4% male negroes, 4% white infected and found them difficult to cure.

Skeenas ducts were investigated but we could not demonstrate signs of infection. Endocervicitis and cervicitis was cleared up by light cautery or medication without much change. Barthalins glands were also investigated.

We found in the clinic especially, that the younger the patient the more difficult it was to clear. I think a good reason for that was the lack of co-operation on the part of the patient. They would forget to take their douche or whatever form of treatment we prescribed and the next week would find the Trichomonis thriving again. Some could not afford the douche equipment.

We found that any kind of standard treatment would make a Trichomonis negative swab, but the discharge persisted, which after all was the main concern of the patient. Could this be the basis of some gynocologists regarding Trichomonis Vaginalis as a saprophyte? We found that a change of treatment often helped. The Trichomonis seem to become resistant to some forms of treatments.

I am not going to take up your time in enumerating the numbers of recommended treatments but will outline the latest and accepted as brief as possible. In Obstetrics and Gynecology, August, 1944, Trussel and Johnson of Iowa City, Iowa, give an interesting paper on Experimental Basis for the Chemiotherapy of Trichomonis Vaginalis. They used a standardized technique for testing the protozoacidal action of chemicals employing bacteria free Trichomonis Vaginalis.

They demonstrated over 100 compounds that would kill Trichomonis Vaginalis in ten minutes and a like number that would not kill after ten minutes.

From the above you will understand why I do not begin to enumerate on any specific type of treatment. We will divide the treatments into two classes, office and home.

Office

Painting cervex vagina and vulva with a liquid chemical. Insertion of a small pack to prevent staining of clothes. Insufflation of a powder or medicated acid jelly. The above being done after drying the vagina thoroughly.

Home

Insert tablets, capsules, and douches, e.g., lactic acid or vinegar. Some authors are now advising daily treatment at office for one week and every second day for the next week without douches and not allowing the patient to have a tub bath.

In virgins treatment must be modified. The liquid chemical treatment is instilled by a pipette or catheter, and they should be instructed in the use of tablets for inserts or douches if they can do so at home.

Whatever type you choose, it must be frequent and prolonged, until all symptoms disappear. Treatment should be carried on during the menstrual period at home. The patient should be checked monthly after period and under observation for at least six months.

Summary

1. Trichomonis Vaginalis is common and difficult to cure. In the resistant and recurring cases check the sources of reinfection and try to eliminate. Change treatment if patient is not responding.

2. Any form of treatment should be frequent for at least two weeks to a month.

3. Home treatment should continue for three months with check up after each period.

4. Patient should be under observation for at least six months.

The Rh Factor

By Bruce Chown, M.D.

Children's Hospital, Winnipeg, Manitoba

In 1940 Landsteiner and Wiener injected the red blood cells of Rhesus monkeys into rabbits. The Rhesus or Rh cells acted as a foreign antigen and caused the production of antibodies (agglutinins) in the rabbits. When the immunized rabbits' serum was now mixed with the red blood cells of Rhesus monkeys the cells were agglutinated. It was further found that if this same serum was mixed with the red blood cells of humans the cells of 85% of white people both male and female were agglutinated. Such people were termed Rhesus positive, or, for short, Rh-positive. Those whose cells were not agglutinated with the immunized rabbit serum termed Rh-negative.

The difference between an Rh-positive and Rh-negative person lies in the quality of his red cells. The difference is fairly comparable to the differences between the cells of person of the different blood groups O, A, B and AB or as they used to be called I, II, III and IV. There is one great difference however. A group-A individual contains A factor in his red cells and anti-B agglutinin in his plasma; a group-B individual B factor in his red cells and anti-A agglutinin in his plasma; the anti-A and anti-B agglutinins are normal constituents of plasma. In contrast anti-Rh agglutinins do not normally occur in human plasma: they occur only as the result of sensitization of Rh-negative women or, rarely, men, by Rh-positive red blood cells.

The term "Rh-positive" then means that the R.B.C. contain a factor that causes those cells to agglutinate when mixed with appropriate serum, and "Rh-negative" means that the cells do not contain that factor. (The original agglutinating serum was obtained from artificially sensitized rabbits: the serum used today is from women who, sensitized by their foetuses, have born erythroblastotic infants.) In Rh positive individuals the Rh factor is normal to them; it is part of their normal make-up and addition of more of it, as, for example, by transfusion, can do them no harm. One is there but adding Rh-containing cells to Rh-containing cells, and no reaction can occur. So too if one gives Rh-negative cells, i.e., cells from which the factor is absent, to an Rh-positive individual one is, so far as Rh factor is concerned, adding nothing and no reaction can occur. Equally one may transfuse Rh-negative cells into an Rh-negative recipient without fear: one is but adding cells in which Rh is absent to other cells in which it is absent.

But—if one transfuses an Rh-negative individ-

ual, one who contains no Rh factor, with Rh-positive blood, that is to say with blood which does contain this factor, one is introducing a substance that is foreign to the Rh-negative person, a substance that is antigenic and can set up an immunity reaction in the recipient. To put this briefly:

	Donor	Recipient		
1.	Rh+	Rh+	=	No reaction (except babies) (See later)
2.	Rh—	Rh+	=	No reaction
3.	Rh—	Rh—	=	No reaction
4.	Rh+	Rh—	=	Possible sensitization and agglutinin production

Blood may be introduced into a person by:

(a) Transfusion.
(b) Subcutaneously, intramuscularly or intraperitoneally.
(c) Passage from foetus to mother through the placenta.

In the last case we do not know if whole R.B.C. or breakdown products of R.B.C. cross the barrier, nor do we know how commonly this occurs. When it does occur it is equivalent to a transfusion or a series of transfusions of the foetal blood into the maternal circulation. If then we have a foetus with Rh-positive cells and a mother with Rh-negative cells, the situation is similar to the possibility four above:

Foetus (Donor)	Mother (Recipient)		
Rh+	Rh—	=	Sensitization and possible agglutinin production

Under these circumstances the mother becomes sensitized and may become sufficiently so to develop circulating agglutinins. The agglutinins may then cross from mother through placenta to foetus and react with the foetal R.B.C to destroy them.

The above scheme is the concept of Rh sensitivity in its simplest form. Clinically it is important to note certain things:

1. Sensitization rarely is sufficiently active in a first pregnancy for the foetus to be affected. Not infrequently foetal or neonatal disease is not produced until after the second pregnancy.

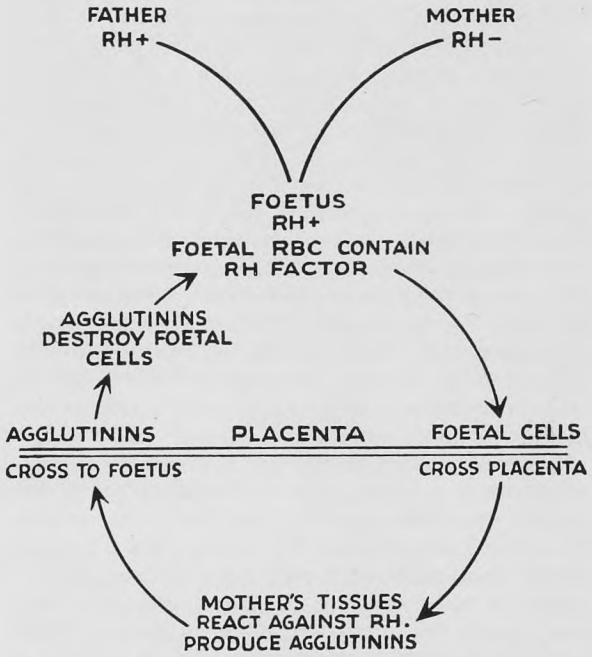
2. Foetal disease is more likely to occur if the father is a homozygote Rh+, in which case every foetus must be Rh+. We are not yet in a position to determine whether the father is a homozygote or heterozygote but hope so to be shortly.

The Disease in the Infant

It is not yet clear how important Rh factor sensitization is in the production of early or late foetal death. The three clinical conditions in infants we are sure of are icterus gravis, neonatal anaemia and hydrops foetalis, though even these can be simulated by other causes. Mortality figures in the past have been about 50% for icterus gravis, 10% for neonatal anaemia and 100% for hydrops. The mainstay of treatment today is transfusion with **Rh-negative blood.** The reason for this is obvious if one considers the above diagram: it is the Rh positive cells of the foetus that are being destroyed and **any** Rh positive cells will meet the same fate. The mother's cells are always of the right type for the newborn baby but her plasma may not be used: it contains agglutinins or other antibodies. One may then use the mother's cells after they have been washed in saline, or may use the blood of another Rh-negative donor. The blood must be given intravenously to be effective.

Transfusion Reactions

We think it a wise precaution to determine the Rh type of any woman or girl before transfusion and to use only A B O compatible Rh-negative blood. The reasons for this recommendation are as follows: Once the Rh-negative woman is sensitized



by an Rh-positive pregnancy, she may remain sensitive for many years, even if she has born no children suffering from jaundice, anaemia or hydrops, and may later react to Rh-positive transfusions with acute haemolysis. Equally a transfusion to a girl or young woman may be the first step in sensitization which will result in foetal death or disease when she does become pregnant. The one exception to the rule is the woman beyond the menopause who has never been pregnant.

Most Rh sensitization transfusion reactions occur in pregnancy or the puerperium. They can be avoided by using A B O compatible, Rh-negative blood for Rh-negative women. A very rare reaction has been reported for Rh-negative men who have received many transfusions.

Summary

Such in outline is the present concept of the Rh factor and its place in disease production. We have omitted from it the newer concepts of Rh subtypes. In our present investigations we are attempting to find out (1) what the end results are in the pregnancies of a large group of Rh-negative women and (2) what the basic physiologic reaction is that leads to disease in foetus and newborn. To accomplish this end we have offered to all practitioners in Greater Winnipeg to do an Rh test on all routine Wasserman bloods from pregnant women, such bloods being identified by a special label supplied by us. We have had a most heartening response from our fellow practitioners and at the present rate expect to test the blood of about 5,000 pregnant women this year. We will be glad to extend this service to any other practitioners in the Province who care to write us about it. It would not have been possible to carry out this project had it not been for the co-operation, most generously given, of Dr. Cadham's technical staff in the Wasserman laboratory of the Provincial Laboratories. It is a pleasure to publicly express our gratitude to the co-operating physicians and to the staff of the Wasserman laboratory.

*Pollen Allergy

By C. H. A. Walton, M.Sc., M.D.

Of all inhalants pollen is probably the most important cause of seasonal hay fever and asthma. Pollen also is a factor in seasonal dermatitis such as ragweed dermatitis. However, other parts of the weed such as the leaves also play a great part in these cases of dermatitis. The present discussion will deal only with the inhalant effects of pollen.

The allergenic toxicity of pollen varies greatly and theoretically a patient may be sensitive to any pollen. To cause symptoms the pollen must reach the patient and for this reason only air-borne pollen is important clinically. The patient's symptoms vary directly with the amount and kind of pollen to which he is exposed. All seed-bearing plants produce pollen. Many plants, especially the brilliantly flowered ones, are cross pollenated by insects or by very close proximity of the female and male pistils and anthers in the flower. Such pollen is generally heavy, sticky and is produced in relatively small amounts. For these reasons the pollen cannot reach the eyes or respiratory tract except by direct contact with the flower. On the other hand, many plants can only be pollenated by the wind. In some of these, e.g., the poplar, the male and female flower are on different plants. Wind-pollenated plants produce very large quantities of very small light pollen grains which float readily in the air and are often carried great distances and to great heights in the air depending on the air currents, much like the modern glider. Obviously during the pollenation season the air is heavily contaminated with these particles even at some distance from the plant of origin. It is pollen of this class which causes seasonal conjunctivitis, rhinitis and asthma. The brightly flowered lilac or rose may be in bloom when the symptoms occur and receive the blame but it is the inconspicuous and almost invisible grass flower which is producing the offending pollen.

*Second in a series of short articles on allergy. From the Department of Medicine, University of Manitoba, April, 1945.

It is next to impossible for the patient to escape the widely spread wind-borne pollen unless he remains in an air-conditioned room throughout the season or manages to go to an area where his offending pollen is not found. For this reason, treatment consists almost entirely in an effort at desensitizing so that symptoms are reduced or even banished. Such treatment is specific. Each pollen is allergenically distinct at least as to genera and perhaps family. Thus successful treatment depends on an accurate diagnosis and then adequate desensitization. Accurate diagnosis depends on a knowledge of what pollens occur in the area from which the patient comes, their quantity and dates of occurrence. Obviously each geographic area varies but within each area the number of clinically important pollens is not great. A pollen survey for Manitoba was carried out in 1938 and 1939 and published.[1] A reference to this report will give all the necessary data for the proper management of pollenosis in this province. The survey has been continued and a further report for the past five years is in course of preparation and will be published in the near future.

The diagnosis of seasonal hay fever is seldom difficult and the patient often makes his own diagnosis correctly. However, the occurrence of summer colds especially when they occur without notable constitutional symptoms should always make one think of hay fever. Hay fever is characterized by itching in the nose and palate, severe sneezing, copious rhinorrhoea and nasal obstruction. The nasal mucus membrane is pale and boggy. Generally the eyes are also involved with such symptoms as itching, burning, redness and tearing and photophobia. Asthma may occur with the hay fever and ultimately does so in half the cases. Unless the asthma is severe the patient may neglect to mention it but a careful history will elicit the characteristic symptoms of cough, sticky mucoid sputum and expiratory dyspnoea. The development of asthmatic symptoms in hay fever is of great

prognostic importance because if untreated, there is a definite tendency for it to progress and become perennial. Seasonal pollen asthma may occur without symptoms of hay fever.

Seasonal hay fever and asthma is characterized by occurring in definite periods of the year. In general there are three distinct seasons in this region, Spring, Summer, and Autumn. During the latter part of April the trees commence pollenating. At this time, the poplars, willows, elms and Manitoba maples pollenate heavily and are usually finished before the middle of May. Ash pollenates in the first half of May and the oak, hazel, alder and birch pollenate in the last half of May and extend into the first week of June. Thus, if symptoms start late in April and terminate early in June, it is almost certain that tree pollen from one of the above mentioned trees is responsible. Because of the large amounts of pollen produced, symptoms are apt to be severe although the season is short.

The grasses start to pollenate after the first week in June reaching their peak early in July. Small amounts of grass pollen are found throughout the Summer. The important grasses in this province are Canada bluegrass, timothy, redtop, brome grass, quack grass and of course the field crops. Plantain pollenates in late July but does not appear to be a serious hay fever offender in Manitoba.

The pigweeds start pollenating early in July and continue throughout August but are not of very great clinical importance. Russian Thistle and Burning Bush pollenate heavily from July on and are of great importance.

The most important members of the ragweed group are Western ragweed, giant ragweed and burweed marsh elder (false ragweed). While these weeds are not as prevalent in Manitoba as they are to the south and east, they are increasing rapidly in extent and are a very important factor here. Burning bush is used as a domestic decoration and pollenates in July but ragweed generally starts serious pollenation early in August and persists into the middle of September. Members of the sage family, notably prairie and pasture sage and the common mugwort occur throughout the province. They have about the same pollenation dates as the ragweeds and are important causes of pollenosis in Manitoba.

If the above observations are kept in mind it should not be difficult to judge what pollens are causing the trouble and a few simple scratch tests will generally confirm the diagnosis. Remembering that the sensitivity to any pollen is specific, it is obvious that a positive skin test to tree pollen for example, could have no bearing on a case whose symptoms definitely started in August each year. On the other hand, such a finding may lead to further study of the patient's history and the eliciting of a history of repeated sharp "colds" each Spring. Assuming an accurate history if the local air-borne pollen facts are known, a diagnosis can easily be made and accurate treatment prescribed.

Treatment by hyposensitization must be done by extracts of the pollen known to be causing the trouble. Treatment should be started well before the expected season and carried through the season at the highest dose the patient can tolerate. This dose can advantageously be given at three and a half week intervals throughout the year, thus obviating the nuisance of strenuous preseasonal treatment. Generally treatment is only effective in the season it is given and must be repeated each year. In adequately treated cases, treatment for several successive years sometimes will protect the patient in later years. Treatment must always be carefully supervised by the doctor as severe constitutional reactions are not infrequent.

Treatment of seasonal hay fever and asthma is important not only to relieve the patient's very severe symptoms but to prevent the development of perennial symptoms. This is unfortunately a not uncommon outcome. Careful and adequate treatment gives excellent results in most cases and well repays the trouble involved.

There are cases of seasonal allergy occurring in this region which do not appear to be pollen sensitive. It seems highly likely that a great many of these are due to air-borne spores of fungi. A study of this problem has been carried out and is continuing and will be reported at an early date.

Reference

[1]Walton, C. H. A., and Dudley, M. G.—C.M.A.J., 1940, 42—430-4.

* * *

Headache and disease are not far apart. Headache in persons unaccustomed to it is a serious symptom.—Hughlings Jackson.

♦

Free Library Postal Rate for the Medical Profession Within Manitoba

The Medical Library has a reduced postal rate for use on all loans of BOOKS and PERIODICALS mailed to the medical profession residing within the province of Manitoba. When the borrower receives the loans, all that has to be done, is to SAVE THE WRAPPER, with the LABELS supplied by the library, and follow the instructions thereon. NO POSTAGE need then be PAID.

♦

Action may not always bring happiness, but there is no happiness without action.—Disraeli.

Intussusception in Infants

By H. M. Edmison, M.D.

Second of a Series of Articles on Radiology

During the twelve months of 1944, ten cases of intussusception were admitted to the Children's Hospital, Winnipeg. There were eight males and two females. The youngest was two months old and the oldest three years. The average age was about ten months.

In seven of these the duration was less than twenty-four hours and all recovered following operation during which the lesion was fairly readily reduced. Three cases were admitted thirty hours or more following the onset of symptoms. All three had gangrenous bowel at operation and none recovered; of these, at least two had been under a physician's care for twenty-four hours or more prior to operation.

Fig. 1—Barium enema. The terminal ileum has entered the caecum causing a filling defect. The appendix is visualized.

Fig. 2—A typical "spiral sheath" appearance. The ileum now fills the caecum and ascending colon.

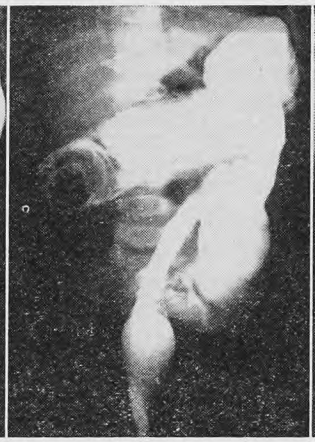


Fig. 3—The ileum has reached the transverse colon followed by caecum and ascending colon.

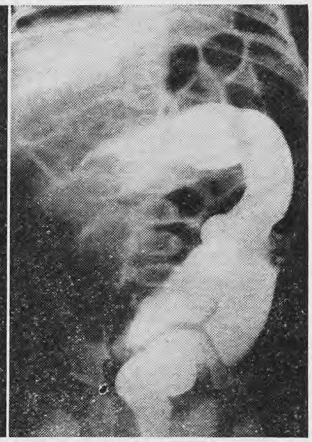


Fig. 4—A typical appearance of the obstruction before barium has penetrated between the layers of bowel. Note the loops of small bowel distended with gas.

Five of the cases were ileo-caecal and the other five were ileo-ileal followed by ileo-caecal. One of the latter showed two separate intussusceptions; an ileo-ileal and an ileo-caecal. A barium enema was done in nine cases and all showed positive evidence of intussusception. The position of the lesion when examined was as follows: ascending colon, one; hepatic flexure, four; transverse colon, three; descending colon, one. The examination was discontinued as soon as the diagnosis was established.

Intussusception occurs most frequently in otherwise healthy male children. At least half the cases are between five and seven months old and almost all of the remainder are less than two years of age.

Briefly, the clinical signs are: colicky pain, blood and mucous in the stool and a palpable tumor in the abdomen. The onset of pain is sudden and is frequently associated with vomiting, restlessness and pallor. The abdomen is usually relaxed and there is rarely any elevation of temperature, but there may be some degree of shock. The tumor can often be felt at some point along the course of the large bowel and if low on the left side the leading portion of the intussusception is sometimes felt on rectal examination.

It has been said that the signs and symptoms of this condition are so characteristic that radiographic examination should not be necessary. This may be true in some cases, but the importance of making an early diagnosis cannot be over-emphasized. If unrecognized, intussusception is almost invariably fatal and the burden rests on the physician who is first called.

Many excellent articles have been written on the use of roentgen rays as an aid to the diagnosis of intussusception, and three methods of examination are described.

Plain films of the abdomen may be of some assistance, particularly if gas is present in the lower loops of ileum. The outline of the tumor is sometimes fairly well defined and gas between the layers of the bowel may form characteristic shadows. Interpretation, however, is difficult and must be carefully integrated with clinical signs.

A thin barium mixture can be given by mouth and the lesion demonstrated by subsequent films but this method is time-consuming where time is very important. We also think that there is danger in giving barium by mouth in the presence of obstruction.

Barium enema, in our experience, is the most dependable type of examination and the most easily interpreted. This can be done quickly and leaves no doubt in regard to the diagnosis. The barium is mixed in the proportions of four ounces of dry barium sulphate to a pint of warm water, and a rectal tube or large catheter is attached to the end of the enema tubing. The mixture is then allowed to flow through the tube to eliminate air and the catheter is inserted for a distance of about three inches. If the catheter is threaded through the hole in a rubber stopper, an excellent means of maintaining pressure is provided. The child is placed supine on the fluoroscopic table, the arms and legs held by assistants while the buttocks are pressed firmly together or the rubber stopper is held in position. The enema is then observed as it enters the colon under moderate pressure. The enema can need not be raised above shoulder level.

There is almost always an obstruction at the site of the intussusception but this may recede as the enema advances, and in early cases it is sometimes possible to reduce the lesion in this way. We have done this on several occasions but do not recommend the practice because it is often difficult to be absolutely sure that the intussusception has been reduced completely, especially as there is a possibility of an ileo-ileal lesion being present. Another important reason is that there is no way of knowing the condition of the bowel at the time of the examination. We therefore think that the examiner should be satisfied when he has confirmed the diagnosis.

If the tumor is palpable it should coincide with the site of the obstruction. The picture is usually characteristic as it is caused by the presence of barium between the invaginated portion and the receiving portion, and has been described as a "spiral sheath" or a "spun wire" appearance. Only rarely does the barium pass through the lesion and visualize the bowel above. As soon as this part of the examination is completed, films are made before and after evacuation, both for record and to confirm the fluoroscopic impression.

Normally the enema flows freely around to the caecum and the terminal ileum or appendix should be visualized to insure complete filling. Occasionally spasm or attempts of the infant to expel the enema may present difficulties but even in these cases repeated attempts are usually successful.

Clinical Luncheon Reports

St. Boniface Hospital

Fracture Results in the Services

By Dr. Digby Wheeler

The really extraordinary results obtained by medical officers in the treatment of fractures was shown in a series of X-ray films. Pictures taken soon after the injury was sustained showed, in some cases, bones that were shattered. Later films revealed the progress which followed treatment. Judged by pre-war standards the results were remarkable. Lt.-Col. Ryan and Major MacKinnon told of the care wounded men receive as they are moved from front line to base hospital. They also discussed the methods used in the treatment of fractures.

Drs. Agnes Murray, Henry Funk and K. C. McGibbon discussed the advances in care of civilian cases.

Rupture of Ulcers

By Dr. W. F. Abbott

Dr. Abbott presented the case of a women of 32 who having had one delivery with medical attention decided to economize on her second by employing a midwife. After being in labour for some days she finally called her doctor who found her pale and exhausted with rapid pulse and palpatory findings that suggested a smaller uterine and a larger extra-uterine mass. He recognized that rupture of the uterus had occurred and, having no other alternative, sent her to the City. The roads were exceedingly bad and the conveyance, the only one obtainable, was a truck. The journey occupied four hours and when she arrived she was almost in extremis. Her pulse could not be counted and barely could be felt. It was impossible to determine the blood pressure. She was taken to the operating room and given 750 c.c. of plasma and 750 c.c. of blood. When the abdomen was opened the uterus was found torn from fundus to right broad ligament. The placenta and the body of the child were in the abdominal cavity. The head was still within the uterus. This plugging of the wound by the child's head undoubtedly saved the mother's life. Dr. Abbott felt that the patient would have a better chance to survive if the rent were repaired than if hysterectomy were attempted. This was done and the patient left the operating room in better condition that when she entered it. During the next 12 hours 3,000 c.c. of fluids were given and during succeeding days blood and plasma as well as saline were administered. The patient recovered.

♦

Winnipeg General Hospital

Tumour of the Urinary Bladder—Dr. C. B. Stewart

Dr. Stewart said that tumours of the urinary bladder occurred in the ratio of 4 to 1 in males, mostly after the fourth decade. Ninety-five per cent of these tumours are epithelial in origin, and of

these 95%, 90% are papillary tumours. These tumours are graded, Broder's classification, 1, 2, 3, and 4—4 being high grade and 1 being very low grade or non-malignant. Symptoms may be haematuria, intermittent or continuous. Dr. Stewart stressed haematuria as initial, continuous or terminal in relation to urination. The extension of these tumours is by lymphatics or blood stream.

Investigation: Dr. Stewart stated that the patient should have a thorough general physical examination in addition to sedimentation test, blood count, blood urea nitrogen, kidney function, and intravenous urogram.

Dr. Stewart mentioned the advance in treatment of bladder tumours by means of electro-coagulation. Treatment is via the urethra and is favorable to grades 1 and 2 tumour which are not infiltrating the bladder wall. Dr. Stewart has not seen favorable results in the use of deep X-ray radiation of bladder tumours.

Case Report

Tumour was an epithelial epidermoid. The patient's physical examination was normal, including blood urea nitrogen, sedimentation rate, blood, and chest. He had 8 to 10 red blood cells and 8 pus cells per H.P.F. The intravenous urogram was shown on the screen. The patient had a squamous type carcinoma, grade 3, infiltrating the bladder wall. A cystectomy was decided upon.

Operation: Bilateral transplantation of ureters into sigmoid extra peritoneally at one sitting. The right ureter was implanted first, then the left. Dr. Stewart gave details of the technique of the operation of transplanting ureters into the sigmoid.

This patient on return to ward had a rectal fluid output of 1,800 to 4,200 ccs. daily. He had a wait of some time and in February, 1945, had a complete cystectomy. He empties his bowel every 4 to 6 hours, with good control. Dr. Stewart showed an intravenous urogram after cystectomy; there is a slight dilatation of the ureters at the lower end where they enter the colon. He also showed colored photographs of the tumour.

Discussion: Dr. Morse stressed that the surgeon must individualize the tumour and the patient. He mentioned the danger of ascending infection via the ureter from the bowel. He also mentioned that the lower end of certain ureters either have a poor blood supply or supplied by the arterial system of the bladder. Such ureters when transplanted to the colon may slough; the ureter then must be transplanted to the skin. This apparently is an unavoidable hazard to the operation. Dr. Huggins, of Chicago, advocates transplanting the ureters, before cystectomy, to the skin. Col. Ash, of the Bladder Tumour Registry, does not put much faith in the value of radiation for bladder tumours. Dr. Mackey mentioned the direct radiation of bladder tumours; its value has not been determined.

♦

Further Report on Case of Subacute Bacterial Endocarditis Treated With Penicillin, With Autopsy

Dr. F. G. Allison and Dr. D. Nicholson

Dr. Allison paid tribute to Dr. Roberta McQueen for her care in making up a large colored chart on the blackboard of this patient's record.

This patient was presented before and apparently was not benefitted by the extensive treatment of Penicillin. The patient died 33 days after last admission to hospital. He received 5,770,000 units of Penicillin. The patient was not given Heparin. Some authorities believe there are as many cures without Heparin as with.

Post-mortem Findings—Dr. Nicholson: Marked oedema. Nothing significant in the gastro-intestinal tract. Spleen and kidneys were enlarged and contained infarcts. Liver was enlarged. Chest—moderate pleural effusion. Heart was greatly enlarged on the right side; mitral valve had vegetations; no lesions on the aortic valve. Several chordae tendinae ruptured due to active inflammatory process. On the posterior aspect of the left ventricle, involving the coronary branch of the right coronary artery, there was a small abscess. There was no apparent effect from Penicillin at the time of autopsy.

Dr. Wilt showed a Penicillin drip apparatus — gravity method. Reservoir holds sufficient for 10 hours. Steady flow is maintained by capillary tube system. It works on the principle of atmospheric pressure.

This case was reported in the Manitoba Medical Review for April, 1945. The patient was readmitted to hospital with fatal result.

Winnipeg Medical Society—Notice Board

P. H. McNulty, President
A. M. Goodwin, Vice-Pres.

Next Meeting
Friday, May 18th

W. F. Tisdale, Secretary
E. S. James, Treasurer

The Society

In a few more days our Society will have completed another year of its existence. Born in 1913 by the fusion of two older (and conflicting) groups its own growth proves that in union and co-operation there is strength. For 32 years the Society has grown in size and influence until now it stands as one of the largest and most important medical groups in the Dominion.

The success which year after year has marked the work of the Society is not the result of chance. It is due chiefly to the co-operation and progressiveness of the membership as a whole, but leadership, too, has been important and our Society has been fortunate in its selection of executive officers. Only those who have held such office can realize how deeply the honour is appreciated. To be chosen to lead one's fellows through the uncertainties and hazards of another year is a testimonial of confidence and esteem which fills the recipient's heart with pride and happiness. Thus each one in his turn gives to the full and without stint all that his genius and talent can contribute to the welfare of his fellows and to the advancement of their Society. And so it is that year after year, president after president resigns his trust to its givers and receives from them their commendation and well deserved thanks.

The President

A few days hence the retiring president will give an account of his stewardship. Dr. McNulty is a man of action rather than of words. Results are what he is after and then with a minimum of delay. That, doubtless, is why he chose to be a surgeon and those things by which he will be remembered are analogous to surgical procedures. For example, he found the Constitution under which we worked decrepit and faulty. So he performed a rejuvenating-plastic operation long overdue. Again his careful study of the current health schemes enabled him to detect in them several sources of potential danger. These he laboured to excise so that future troubles would be less likely to occur.

He chose a very happy way of showing how he regarded our colleagues who have been with the services, when he entertained them at a **Welcome Home Dinner.** That occasion gave him an opportunity also of showing in a very tangible way his appreciation of the goodwill and co-operation which he has received from those over whom he presides; for he invited all the members of the Society to be his guests and at the same time to be co-hosts of the returned men. Although there are many lady doctors in our Society none were present though all had been invited. Their absence, however, was not their fault for on the back of each of their invitations Dr. McNulty had written "Sorry, pal, but it's a stag," and then, by an inspiration that could have come only from a chivalrous and thoughtful heart, he assuaged their natural disappointment with — roses.

Dr. McNulty has his strength but also his weaknesses and high in the latter category I would place his ignorance of the sublime works of the Bard of Stratford. I was asked to furnish a motto or verse suitable to place upon the invitations. Neither in nor out of my memory could I find anything more fitting than the words spoken by Guildford to Anne Boleyne and her friends in the first act of Henry VIII. With a few minor changes it fitted very well. Imagine my horror when I found these lines credited to myself. My life has been a blameless one so far as plagiarism is concerned. I admire Shakespeare, I read his works, I have even been known upon occasion to quote him but never before have I been placed in the embarrassing position of appearing to steal from him. Much as I like Dr. McNulty I hereby accuse him of deliberately putting my hand in another person's pocket and then drawing attention to the fact. If he had put "Shakespeare and J.C.H." or even "J. C. Shakespeare," it would not have been so bad, but to set forth 8 lines of Bill's Best and then brazenly append thereto my initials—well, "brethren, those things ought not to be." J.C.H.

♦

An innovation this year will be the presentation of Testimonials to former presidents. All those who have held that office and who are able to attend will be given tangible evidence of the appreciation of their colleagues in the form of an attractive document which they will, I doubt not, view with pleasure and display with pride. It is natural for one to find satisfaction in the approval of those with whom and for whom he has laboured. The consciousness of work well done and the esteem of one's fellows — what higher reward can one have than that?

There are some who have not held office who will also enjoy the expressed goodwill of their fellow-members. These will be the recipients of Life Memberships. At the moment of writing their names have not been selected and so I can say nothing about them, but I am certain that the choice will meet with universal approval.

Something Old

"Why do doctors so often make mistakes? Because they are not sufficiently individual in their diagnoses or their treatment. They class a sick man under some given department of their nosology, whereas every invalid is really a special case, a unique example. How is it possible that so coarse a method of sifting should produce judicious therapeutics? Every illness is a factor simple or complex, which is multiplied by a second factor, invariably complex—the individual, that is to say, who is suffering from it, so that the result is a special problem, demanding a special solution, the more so the greater the remoteness of the patient from childhood or from country life.

"The principal grievance which I have against the doctors is that they neglect the real problem, which is to seize the unity of the individual who claims their care. Their methods of investigation are much too elementary; a doctor who does not read you to the bottom is ignorant of essentials. To me the ideal doctor would be the man endowed with profound knowledge of life and of the soul, intuitively divining any suffering or disorder of whatever kind, and restoring peace by his mere presence. Such a doctor is possible, but the greater number of them lack the higher and inner life, they know nothing of the transcendent laboratories of nature; they seem to me superficial, profane, strangers to divine things, destitute of intuition and sympathy. The model doctor should be at once a genius, a saint, a man of God."

(The Journal Intime of Henri-Frederic Amiel, Scheveningen, August 22, 1873.)

♦

From the "Statutes of the Medical Faculty at Frankfurt-on-the-Oder," 1588

The Dean of the Medical Faculty, after having made a requisition upon the doctors specially and individually, shall twice each year summon the graduates and scholars together, in the spring to visit the meadows, mountains and villages, in order to acquire information of herbs and their properties. To these gatherings the apothecaries shall be invited. In the autumn the object of these excursions shall be to gain a knowledge of the roots of importance in medicine. The scholars shall provide the usual banquet.

♦

Common things most commonly occur.—Samuel Gee.

♦

Let us a little permit Nature to take her own way; she better understands her own affairs than we.—Montaigne.

Something New

Rheumatoid arthritis has been treated successfully with prostigmine. Prostigmine counteracts the spasm responsible for much of the crippling and pain. The drug is given orally in doses of 15 to 30 mg. three times daily with subcutaneous injections every second or third day of 1 or 2 cc. of a 1 in 2,000 solution. Tincture of belladonna in doses of 8 to 15 min. was given with each oral dose, and 1/100 grain of atropine was given hypodermically with each subcutaneous dose. According to Trommer and Cohen of Philadelphia the results of this method of treatment were very good.

♦

R. K. Finley of the Miami Valley Hospital, Dayton, Ohio, recommends that **parenteral infusions should be given beneath the fascia lata.** Discomfort is slight and absorption rapid. The average time for the absorption of 1,000 cc. of saline solution was fifty-six minutes, or less than a third of the time required to inject the same amount of fluid by hypodermoclysis.

♦

Insomnia may have something to do with salt metabolism. At any rate M. M. Miller of Ellis Island found that **restriction of salt relieved the insomnia** of 12 patients under his care, 6 of whom were morphine addicts.

♦

The association of severe bronchial asthma and hypereosinophilia in an adult should arouse suspicion of **periarteritis nodosa** as an underlying factor. K. D. Wilson and H. L. Alexander of St. Louis investigated 300 patients suffering from periarteritis nodosa. Of these 54 were asthmatics and in 47 of these the eosinophil count averaged over 53%.

♦

Cardiospasm (acholasia of the cardia) may be due to thiamin deficiency. P. M. Moore of Cleveland, noting the similarity of symptoms in cardiospasm and avitaminosis B, made use of thiamine in treatment with good results in over half the cases. The early institution of thiamin therapy may prevent progress of the condition.

♦

Pericardial distress which does not respond to vasodilating drugs or to sedatives may be an evidence of the male climacteric in which case testosterone is likely to give prompt relief.

♦

Great tenderness to light fist percussion is a sign of **lung infarction.** Other conditions with similar physical findings are not attended by this hypersensitiveness.

Editorial

J. C. Hossack, M.D., C.M. (Man.), Editor
R. B. Mitchell, B.A., M.D., C.M. (Man.), F.R.C.P. (C), Associate Editor

Already the war is over for many of our friends back from overseas and soon, let us hope, those others still in uniform will be back with us. What the future holds for them and for us remains to be seen. None of the ex-service men will be able to start where he left off. The fact that we live in a changing world is more evident in our profession than it is, perhaps, in any other sphere. The new practice will call for many men on salary and those who for the past five years have had no worry about accounts and collectors may prefer the advantages of salaried positions to the uncertainties of private practice. There is, however, an unfortunate tendency for doctors on salary to lose interest in the profession. Their bread and butter depends upon the goodwill of laymen and, in the past, this has led to friction between the dependent and independent groups of doctors. The development of a schism between these groups would bring only disaster to both. Therefore, it would be wise to have the Association responsible for the approval of terms of contract and have the doctors, in any capacity, responsible to the Association. In this way and in this way only can the interests of all be safeguarded. J. C. H.

Book Reviews

Essentials of Allergy

A new or unfamiliar subject is best approached by way of a small book. Allergy is, to many, an unfamiliar subject and written especially for them is Creip's "Essentials of Allergy." It is a "3C" book—clear, concise, comprehensive. It covers the subject in 358 very readable pages and has in addition an index of 23 pages, each of two columns, which makes reference very easy. The text is divided into 17 chapters, the first three of which deal with hypersensitiveness, anaphylaxis and allergy in a general way, defining terms, explaining mechanisms and discussing the physiology, pathogenesis and pathology of the hypersensitive state. Then come chapters dealing with diagnostic criteria and procedures, and with the broad considerations of treatment. Hay fever, asthma and nasal allergy get a chapter each, and so also do skin-, serum-, drug-, bacterial-, and fungus-allergy. Under the heading "Avoidance of Offending Foods" there are 26 pages of simple diet tables and recipes. Elsewhere charts and tables simplify the problems of diagnosis and treatment. Each condition is illustrated by means of brief case reports, and the essence of each of these is set forth in numbered "teaching points". At the end of each chapter is a summary. By reading the 17 summaries the least initiated reader can, quickly, acquire a reasonable familiarity with the nature, causes, mechanisms, manifestations and principles of treatment of allergy. A careful reading of the text will increase this familiarity to useful, usable knowledge. The author, Leo H. Creip, is assistant Professor of Medicine in the University of Pittsburgh. He is a Fellow of the American Academy of Allergy and is Consultant in Allergy to the U.S. Veterans' Administration. He writes clearly and pleasantly and his book will please those who, with Coulson, believe that "He is the best author who gives us the most knowledge and takes from us the least time." War time restrictions have not prevented the publishers from maintaining their traditional standard of quality.

Essentials of Allergy, by Leo. H. Creip; Lippencott, Montreal, $6.00.

♦

Control of Pain in Childbirth, by Clifford B. Lull and Robert A. Hingston, pp. 356, with 100 illustrations in black and white and 32 subjects in color: Philadelphia, London, Montreal, J. B. Lippincott Company, 1944. $9.50.

So far as the reviewer knows this is the first book devoted wholly to the subject of the control of pain in childbirth. It is only within relatively very modern times that it has been possible to give any relief to women in the pangs of labour. Simpson's daring innovation of administering chloroform in childbirth is less than a hundred years old. Since 1848 there have been many advances both in the number of agents available for the production of anaesthesia, analgesia or amnesia, in the technique of administration and in knowledge of the indications and contraindications for each agent. One of the most remarkable forward steps in the control of pain in childbirth has been the introduction of continuous caudal anaesthesia, and since one of the authors of the book was in large part the originator of this procedure it is not surprising that it is described in detail in this work.

There is little opportunity for adverse criticism of this book. Some readers may think that inordinate space is given to the subject of continuous caudal anaesthesia, which admittedly can be given only in a well-equipped hospital with specially trained anaesthetists. On the other hand, when properly given the measure is so spectacularly successful in the relief of pain and the absence of harm to the child that it can truly be proclaimed the ideal method.

The book is well illustrated. In particular the color charts show graphically the parts of the body depressed or stimulated by the various anaesthetic

substances. There is a good bibliography at the end of each chapter. Control of pain is considered not only in vaginal delivery but in caesarean section, and the maternal complications, such as toxaemia, disproportion, blood dyscrasias, etc. There is a helpful chapter on the premature baby.

It can be commended to any one engaged in obstetric practice as a reliable guide to the relief of women in labour.

The book has been so well received that a second edition is being prepared.

♦

The Psychopathology of Crime

Dr. Ben Karpman, Senior Medical Officer and Psychotherapist at St. Elizabeth's Hospital in Washington has just published a book on the psychopathology of crime.

It is a large volume of over 800 pages divided into four parts, each of which is the autobiography of a criminal. The purpose of the book is to reveal the development of law-breakers from the early bending of the twig in childhood to the ultimate distortion and deformity of the grown tree. We see how potent are the effects of training, environment and example. When these are bad the results to the child are disastrous. Equally disastrous are the attempts at reformation when these are simply punishment and incarceration. The naughty boy who enters a Reformatory merely naughty emerges as bad and jails and penitentiaries are more effective as schools of crime than as places of reform. The public do not realize that most criminals are psychopathic and that their crimes are analogous to the complaints of the psychoneurotic. The psychoneurotic may be defined as an introvert who expresses his mental turmoil through his visceral misbehaviour. The criminal is an extrovert who expresses his mental turmoil through his anti-social behaviour. The psychoneurotic is a law-abiding criminal. The criminal is a law-breaking neurotic. The problem of crime is one of great importance and it will not be solved by the jail, the lash, or the chair. Criminals retain in large part the natural aggressive instincts of infancy. Wish fulfillment in the child is simple — he takes what he wants and acts as he wishes. Such behaviour is incompatible with social practice and the accomplishment of civilization is that we can control impulses which, in the lower animals, are the law of nature and which are instinctive in ourselves. Those in whom the urge is poorly controlled or uncontrolled fail to adjust themselves to the demands of society and express their maladjustment in anti-social or criminal acts. Punishment for these acts generates hate, hate inspires revenge, and revenge, when attempted or accomplished, leads to further punishment. Such is the vicious cycle that is so often broken upon the gallows.

If there is to be peace in the world not only must international war be abolished but also the internecine strife which we call crime; and crime can be abolished only by understanding and removing its causes. Because Dr. Karpman's book is so revealing in its portrayal of the course of the criminal it is of great value to everyone whose work or interest touches upon crime. Social workers, officers of juvenile courts, lawyers who prosecute and defend, judges who try and sentence, officers who confine and punish all will find much food for thought in its pages. It lays bare the mind of the criminal, exposes the motives and mechanisms which can change a weak youth into a hardened criminal. It is unique in its field, encyclopedic in its scope, remarkably illuminating and bound to exert a wide influence. To the doctor it is valuable as an exposition of psychopathology but even more useful for the emphasis it lays upon the significance of the problems of childhood.

Studies in the Psychopathology of Crime. By Ben Karpman, M.D., Medical Science Press, Washington, D.C., $16.00.

♦

These books may be obtained from the publisher direct or from Colcleugh & Co., 652 Notre Dame Ave., Winnipeg.

♦

Canadian Physicians' Camera Salon

The announcement of the "Canadian Physicians' Camera Salon" under the auspices of the Montreal Camera Club is of wide interest to physicians who are photographic enthusiasts. The Salon is to be an exhibition of prints taken by Canadian physicians and is to be displayed in the Eaton Art Galleries in conjunction with the C.M.A. Annual Convention in Montreal in June.

Entries are being solicited by means of a contest in which cash prizes are offered for monochrome prints and color slides. There are no restrictions as to the subjects or as to the time when the photographs were taken. Complete information is being mailed to all physicians by Frank W. Horner Limited who have undertaken the organization work on behalf of the Montreal Camera Club.

In order to secure additional entries for the Salon, there is besides the closed class for Canadian physicians only, a class open to all Canadian amateur photographers who are members of local photographic organizations.

♦

Let us respect gray hairs, especially our own.
—J. P. Senn.

♦

The education of most people ends with graduation; that of the physician means a lifetime of incessant study.—Marx.

Bill No. 49

An Act to Provide for the Improvement of the Health of the Citizens of the Province

This Act sets up a health plan in four parts, the first part relating to the establishment of local health units for preventive medicine; the second relating to the provision of diagnostic services; the third relating to the establishment of medical care districts including the engagement of municipal physicians; and the fourth relating to the provision of better hospital facilities.

3. Subject to the provisions of this Act, the minister may, as he deems necessary and advisable in the interests of the good health of the citizens of the province, provide for the establishment of such units, areas, districts, agencies, organizations, and services, as are required for that purpose and for the establishment of which provision is herein made.

4. The minister may make such regulations and orders not inconsistent with this Act as are necessary to carry out the provisions of this Act according to their obvious intent or to meet any cases that arise and for which no provision is made in this Act; and such regulations and orders shall be part of this Act.

5. Without restricting the generality of section 4 the minister may make regulations in accordance with the provisions herein set forth for:

(a) the establishment of local health units, and for the inclusion in any local health unit of the whole or any part of any municipality, or of any part of the province which he may designate;

(b) the division of the province into units for diagnostic purposes and areas each comprising one or more of such units, and the provision in each of such units and areas of facilities for the diagnosis of disease and other abnormal conditions of the human body; and the employment in each of such units and areas of the personnel required to operate the facilities;

(c) the approval of the area, or of the alteration of the area, to be included in any district in which a municipality has by by-law, or several municipalities have by agreement confirmed by by-law, arranged to provide general medical care; or medical and surgical care, for the residents by the engagement for that purpose of a duly qualified medical practitioner; and

(d) the establishment and organization of hospital districts, and hospital areas each comprising two or more hospital districts, including the establishment, and appointment of the members, of the governing boards of the respective hospital districts; and the inclusion in any hospital district of the whole or any part of a municipality or of any portion of the province which he may designate.

6. A regulation made under this Act shall not have any force or effect until it has been

(a) approved by the commission at a meeting thereof;

(b) confirmed by order of the Lieutenant-Governor-in-Council.

7. (1) There shall be an advisory commission which shall be appointed, and shall have powers and duties, as herein provided.

(2) The commission shall consist of eleven members, namely, the Deputy Minister of Health and Public Welfare, who shall be an ex officio member, and ten other members appointed by order of the Lieutenant-Governor-in-Council, of whom

(a) three members shall be nominated by the executive of the Manitoba Division of The Canadian Medical Association; and shall be members in good standing of that association;

(b) three members shall be nominated by the executive of the Union of Manitoba Municipalities from among their members;

(c) one member shall be nominated by the Board of Governors of the University of Manitoba, and shall be a member of the Faculty of Medicine of that university; and

(d) three members shall be recommended by the minister .

(15) The commission shall

(a) advise the minister at his request, or of its own motion, in all matters relating to this Act and the administration or operation thereof; and

(b) discharge such other duties relative to this Act as the minister may request it to perform.

Regulations may be defined as a rule or order prescribed, sections 4, 5, 6, allow the Minister of Health to lay down many regulations for local health units, diagnostic unit areas, medical care districts, and hospital districts and hospital areas. The regulations of the Minister on sections 4, 5, 6 shall not have any force or effect until it has been approved by the Advisory Commission at a meeting thereof, No. 6 (a). Section 7 gives the establishment of advisory commission and section 15 (a) (b) gives the duties of the commission. Bill 49 lays the framework of what it calls "An Act to provide for the Improvement of the Health of the Citizens of the Province." The filling in of this framework to provide the objects of Bill 49 should give the Minister and the advisory commission many problems and much work.

Part I

Local Health Units

9. (1) Regulations made by the minister for the establishment of a local health unit shall provide

(a) for the appointment

(i) of a medical director who shall be a duly qualified medical practitioner and shall have the qualifications required by a medical officer of health under the regulations made under The Public Health Act; and

(ii) of such other professional, technical, administrative, and clerical, personnel as may be necessary;

(2) The regulations may also provide for the services that shall be rendered by, or through the agency of, a unit and for the standard of those services.

13. (1) The medical director of the unit appointed under the regulations shall be

(a) a member of, and secretary of, the board;

(b) the chief administrative officer of the unit;

(c) the health officer for each municipality wholly included in the unit; and

(d) where a municipality is partially within the unit, health officer for that part thereof that lies within the unit.

(2) The medical director shall have complete supervision over the work of all subordinate personnel of the staff of the unit and shall assign to them their duties;

14. Where a unit is established under this Part the entire cost of the maintenance and operation thereof, including therein the salaries and wages of the officers, clerks, and employees, of the unit, shall be paid by the government from and out of the Consolidated Fund with moneys authorized by an Act of the Legislature to be paid and applied for the purpose of this Act or the purposes herein set forth; but one-third of such cost, including therein those salaries and wages, shall be charged by the government against the municipalities that are wholly or partly included in the unit, in the proportions fixed in the regulations, and shall be repaid by those municipalities to the government as prescribed by the regulations.

15. The persons from time to time constituting the advisory board of any unit shall be a body corporate and politic under the name or number or both designated in the regulations; and shall have charge and control of matters affecting health in, and power to administer the health affairs of, the unit in accordance with this Act and any other Act and the regulations made under this Act and under any other Act. S.M. 1941-42, c.41, s.3.

17. (1) The board of a unit shall be composed of either five or seven members as the minister may direct; and in the case of a board of five members two of them, and in any other case three of them, shall be appointed by the minister from residents of the municipalities that are wholly or partly included in the unit; one of whom shall be a duly qualified medical practitioner; and the remainder of the members shall be appointed by the minister from among those persons nominated by the councils of the respective municipalities.

Please note there are local health units at present in St. James, St. Vital and Dauphin. Local health units provide a medical director and staff which takes care of the public health in the most modern interpretation. The medical director and staff would be civil servants, pension rights, on salary, paid out of the consolidated revenue of the province. An estimated 23 of such local health units will be in operation when Bill 49 is fully implemented. May I direct your attention to Section No. 17, the setting up of a local board including the health director of the local health unit. This board would be composed of leading public spirited citizens of the district who would see to the smooth working of the health unit as outlined by the government in Bill 49 and regulations to be set up by the advisory commission.

As to costs of local health unit, the Minister estimated in his radio broadcast of January, 1945, as $1.00 per person per year. Of this sum the province would assume two-thirds and the balance by the municipality.

Part II

Units and Areas for Diagnostic Services

19. Regulations made by the minister for the division of the province into units and areas, and for the provision therein of diagnostic facilities, shall provide

(a) that the boundaries of each unit shall, in so far as possible, coincide with the boundaries of a local health unit;

(b) that there shall be in the province three areas, each comprising the several units that are designated in the regulations; and that the City of Winnipeg shall be included in the first, the City of Brandon in the second, and the Town of Dauphin in the third, of those areas;

(f) that at a designated place (hereinafter called a "centre") in each unit or area the diagnostic facilities for that unit or area shall be established, maintained, and operated;

(g) that the diagnostic facilities established at the centre in each area shall include those facilities that are of such a complicated or extensive character, or that require such skill or experience to operate or use, that it would not be in the interest of persons receiving the service to establish them at the centre in each unit;

(h) that in each unit and area there shall be employed to operate or make use of the diagnostic facilities such professional, technical, administrative, and clerical personnel as may be specified in the regulations, or, if not so specified, as may be deemed by the minister to be necessary or advisable in that unit or area;

(i) that in each area a person, designated in the regulations, who shall be among the professional or technical personnel employed at the centre in that area, shall supervise and control all diagnostic services established and operated in every unit in the area as well as those at the centre; and shall also be in charge of, and have under his supervision and authority, all other personnel employed under this Part in every unit in the area as well as those employed at the centre;

It is suggested that the first diagnostic unit to be set up will be in Dauphin. The medical men capable of rendering the services in (h) and (i) would of necessity have special training. The specialties would be Pathology and Radiology. These

gentlemen would be full time salary men, civil servants with pension privileges.

Each resident (qualified person) of each municipality would be issued an identification card yearly showing that they were entitled to diagnostic facilities at the diagnostic unit. An unqualified person availing themselves of the services of a diagnostic unit would be subject to charges to be set up by regulation. A qualified person is subject to a service charge not to exceed $5.00 for any one illness. This is to partly cover the cost of X-ray films in such diagnostic procedures, i.e., gastro-intestinal series or encephalograms. The estimated annual cost of a rural diagnostic unit is 50c per person. Of this sum the municipality pays 17 cents and the government 33 cents. If the yearly costs should exceed 50c per person the municipality is liable for anything over 50c per annum. This 50c per person per year is maintenance, the capital cost of diagnostic units is met by the government

Part III

Medical Care Districts

25. (1) Any municipal corporation from time to time may pass by-laws for engaging a duly qualified medical practitioner or practitioners to furnish medical care, or medical and surgical care, including or excluding medicine, for the residents of the municipality or any part thereof, or of a district comprising the whole or any part of the municipality and the whole or any part of any adjoining municipality or municipalities, either

(a) on the basis of a salary, a capitation fee, or a schedule of fees for services rendered, paid to the physician by the municipality, and without charge to the patient other than an annual levy on all the rateable property, or a personal health levy, as herein provided; or

(b) on the basis of a schedule of fees to be paid by the patient with or without any sum to be paid by the municipality to the physician.

(6) The by-law may provide that a fee shall be paid to the physician by all residents or by certain classes of residents in the manner set out in the by-law and in the contract with the physician or physicians.

(7) No contract with a physician and no schedule of fees shall be valid and binding until approved by the minister ,as provided in the regulations.

(9) If at the time of the first reading of a by-law for engaging a physician there is a resident physician or physicians in the area, the municipality or municipalities submitting the proposed by-law to the vote of the rate payers shall, by a separate ballot at such voting, make provision for ascertaining the preference of the voters as to whether or not the resident physician, or if more than one, which resident physician, or any other physician who subsequently may be appointed if the by-law is approved, ought to be appointed.

(11) Notwithtstanding the provisions of subsection (10), the minister, by three months' notice in writing, may at any time cancel and revoke any by-law passed establishing a district pursuant to either subsection (1) or subsection (2) and cancel any contract with a physician authorized by the by-law.

27. Where the whole or any part of a municipality is included in a medical care district, if the municipality, or that part thereof that is included in the district, is also included in a local health unit and in a diagnostic unit, the government shall, in each fiscal year, pay to the municipality a grant of fifty cents in respect of each member of the population thereof, or of that part thereof that is included in the district, as the case may be, as the population is shown on the latest census taken under the Statistics Act (Canada).

28. (1) The Lieutenant - Governor - in - Council may, by order-in-council, establish a medical care district comprising any area lying wholly in unorganized or disorganized territory, or partly in unorganized and partly in disorganized territory and whether or not any part of the area is in a local government district.

(2) Where a district is established under subsection (1) the government may engage a duly qualified medical practitioner to furnish medical care or medical and surgical care, including or excluding medicine, for the residents of the district.

(3) Where a physician is engaged under this section the minister, on behalf of the government, may enter into an agreement with him providing for his remuneration which shall be either on the basis of a salary, a capitation fee, or a schedule of fees for services rendered, paid to the physician by the government and without charge to any patient.

This is the most controversial of the four Sections of Bill No. 49. Any municipal corporation may engage a medical practitioner to furnish medical or surgical care on a salary, capitation or fee basis. If such a municipality is part of a local health unit and diagnostic unit the government will pay fifty cents per person per annum towards such expense. This fifty cents per person per annum is over and above the 33 cents granted by the government to aid in maintaining a diagnostic unit.

Part IV—Hospital Districts—*The government provides for an orderly and adequate plan for hospitals for rural Manitoba. Hospitals (where necessary) will be built on strategic sites so that existing highways may be utilized to allow of ready transit of patients to hospitals. It is to be hoped that no citizen of Manitoba in organized territory will be over 20 miles from a good hospital. There are provisions that prevent enthusiastic citizens from building a hospital in a non-strategic area. Where possible diagnostic units will be set up in the hospital. The director of the local health unit will have his office here. Also it is proposed that medical practitioners, whether practicing under "Medical Care Districts" or as private practitioners, will have offices in the hospital. The hospital will act as a medical and diagnostic centre for the area. Capital costs to levy upon a district for a hospital—not over $5.00 to each resident of unincorporated village, town or city—upon rateable property not over two mills on each dollar of that equalized assessed value. A*

special hospital tax (amount or limits not stated in Section No. 46) over and above that named may be levied upon the lands and property in the included area.

Part IV

General

53. (1) Where a municipality requires to raise money for any or all of the purposes for which provision is made in Parts I, II and III, it may by by-law levy annually a personal health levy and any other tax for which provision is made herein.

(2) The amount of the personal health levy shall be subject to the approval of the minister but the total personal health levy in respect of any one family shall not exceed the maximum amount fixed therefor by the minister in the regulations; and for the purpose of this subsection the expression "family" means a father, mother, and persons under twenty-one years of age residing with, and dependent on them or on either of them.

56. (1) From and out of the Consolidated Fund with moneys authorized by an Act of the Legislature to be paid and applied for the purpose of this Act or for the purposes herein set forth, the Provincial Treasurer and the Comptroller General on the written requisition of the minister may, subject to the regulations, make grants to such persons, institutions, associations, or other organizations or bodies, as the minister may specify, for the purposes of

(a) improving the facilities for teaching in the Faculty of Medicine of the University of Manitoba;

(b) encouraging research in matters relating to health;

(c) bursaries or scholarships to under-graduate students engaged in the study of medicine; and

(d) bursaries or scholarships to assist graduate medical practitioners who are engaged in post-graduate studies in order to fit themselves to become specialists in any branch of medical science.

(e) training the personnel needed for carrying out the provisions of this Act, and in particular, and without restricting the generality of the foregoing for training technicians, public health nurses, and sanitary inspectors.

(2) The minister may make regulations prescribing the terms and conditions under which grants made pursuant to subsection (1) shall be paid to, and received and applied by, the recipients thereof.

Levy of Personal Health Levy, Sections 53, 54 and 55 outline the persons liable for health levy, regulations for a register of such persons, payment and penalties. A personal health levy for an employee engaged in seeding, harvesting or threshing operations shall not be less than $2.00. The personal health levy is a means of certain individuals contributing to medical costs who have no property or lands and who reside in the district. Hitherto these individuals were entitled to medical care in "medical care districts" without making any tangible contribution for such care.

No. 56 is a most important section. Research will assume, we hope ,a more important role in the future of medicine than in the past. Curative medicine will engage the attention of the majority of medical practitioners for some time to come. However, any health scheme would be unbalanced without provision for research. Section 56 provides for the same. Doubtless, as time goes on, sections a, b, c, d, e may be modified or enlarged.

Recapitulation:

Recapitulation

Local Health Units, as already mentioned, exist in Manitoba. The government proposes to extend their number

Units and Areas for Diagnostic Services break new ground. The government proposes to make available medical diagnostic facilities in rural areas such as urban centres now enjoy.

Medical Care Districts is really another name for a "municipal doctor." There are at least 14 districts in Manitoba with a municipal doctor at present.

Hospital Districts: This is an orderly and integrated plan by the government to provide increased and better hospital accommodation for rural residents.

Bill No. 49 is, as stated, "An Act to provide for the Improvement of the Health of the Citizens of the Province." It behooves every medical man as a citizen of this province to take time out to study the provisions of this bill. The government is anxious for constructive criticism to modify or add to the provisions of this Act. As a leading citizen of his district the local doctor might offer suggestions for the improvement of any or all four sections of Bill No. 49. The average age of a practicing physician in Manitoba is well over 53 years. Many of our colleagues in the Services will practice under the provisions of this Bill. Have we, as members of the profession at home, looked after the Service men's interest in this Act? Have we protected the interests of the young people who will be future graduates in medicine from the University of Manitoba?

May I suggest that the old established order of medicine is changing. Storm signals appear almost daily in the Press suggesting changes in the practice of medicine or protesting the privileges granted medicine under the law. Doubtless the fault does not wholly lie with doctors under a changing social system. However, the writer believes that the profession must cast off the lethargic role of Rip Van Winkle and gird on the armor of Mr. Valiant for Truth. Otherwise, in the not too distant future, the government might take over the direction of the profession, an eventuality which would not have occurred had we kept abreast of the times. —*D.C.A.*

Manitoba Medical Service

A further report by Mr. P. W. Dawson on Medical Service Plans.

The problem of the proper procedure to adopt regarding potential subscribers in the higher income brackets is one giving all Medical Service Plans considerable concern. Certainly, no plan that fails to serve the public can hope to avoid State interference; it is evident that employer contributions are necessary to complete participation by his employees; any procedure that the employer feels is prejudicial to him is prejudicial to the medical profession. The compromise adopted by the Manitoba Medical Service that doctors may make an additional charge to patients above certain income levels is that followed by a number of Plans. Intrinsically, it appears fair. Yet, it is the source of considerable criticism of the Plan and the profession. Good public relations demand that there be a minimum of misunderstandings and misgivings. Those Plans which provide that a patient who elects private accommodation in a hospital will be charged an additional fee by the doctor are finding that this procedure is not a source of irritation. It is fairer to the doctors, who say, too, that its simplicity and clarity aids their office administration.

♦

Enforcement of the penalty for late reports has had to be made for March accounts because the condition is getting worse instead of better. "Not knowing that the patient belonged to the Manitoba Medical Service will **not** be accepted as a reason." Hang a Manitoba Medical Service card in your office; it will remind your patient perhaps; and ask every patient if he or she is a member. If the membership card has been lost or forgotten by the patient and you are waiting for it before sending in your report, telephone this office, and the numbers will be furnished. At the last meeting of the Board of the Manitoba Medical Service the following motion was passed: "All accounts received up to the last day of any month will be paid in the following month. Accounts of the preceding month, received up to the tenth of the month, will be paid without penalty." For example, April accounts received in April will be paid in May; April accounts received between the first and tenth of May will be paid without penalty in June.

The Manitoba Medical Service has now been in operation for seven and a half months, and no official fee scale for any specialized group has been provided. This question of specialist fees was a live issue long before the service started. The situation makes administration difficult, in some cases impossible. The medical director cannot set fees; all he can do is to make a token payment. If the fee scale when provided differs from these payments, it is going to create an administrative problem which will mean that it may be many months before doctors receive cheques covering the adjustments. We would like to demonstrate to the public and governments that we have organizing ability, but this state of affairs is poor evidence of it.

Motion adopted by the Board: "In procedures not listed in the General Practitioner schedule of fees authorized by the Manitoba Medical Association, the Medical Director is empowered to strike a fee for each, and to keep a record of such fees; this is to apply until such time as the Manitoba Medical Association supplies a scale for missing procedures."

Cases have been reported to us where practitioners having recommended an operation or some prolonged treatment have advised the patient to join the Manitoba Medical Service for the purpose of having the bill paid. Such action is at least unethical and could be regarded as dishonest. The Manitoba Hospital Service Association does not pay the hospital bill in such cases. In future when applying for authority in cases that are not emergent, please give the date when you first advised the major treatment.

The number of members of the Manitoba Medical Service was, on April 1st, 13,600. Bills submitted, after approval, were as follows: January, $12,168.00; February, $13,553.00; March, $15,325.00.

Several accounts have been held up because specialists have given treatments outside the restricted fields which they chose. A specialist is allowed to practise a second special field for which he can charge general practitioner fees, but he is not allowed to take general practice as his second choice. Several doctors do not seem to have studied the implication of the restricted practice on their former custom.

The heavy utilization of radiology, refractions and laboratory services suggests that those who drew up the estimates for a National Health Insurance plan were far wide of the mark. When sufficient time has elapsed, useful statistical records of all types of service can be obtained and many changes in alignment of fees may be both desirable and necessary. It would help if doctors would consider the general problems of a community service as distinct from their personal and restricted ones, and send useful suggestions to this office.

On and after July 1st, 1945, the Firefighters' Medical Service will be absorbed by the Manitoba Medical Service. The rules, regulations, report forms and fee schedules will be those of the latter service.

E. S. Moorhead, Medical Director.

Personal Notes and Social News

Dr. and Mrs. A. D. MacCallum, of Charleston, West Virginia, wish to announce the birth on April 14th, 1945, of a son (James Judson).

♦

Captain J. B. Moir, R.C.A.M.C., and Mrs. Moir are happy to announce the birth of a daughter on March 30th, 1945, at the Winnipeg General Hospital.

♦

The Executive and Members of the Manitoba Medical Association wish to express their sympathy to Dr. F. W. Jackson on the loss of his mother, who recently died at Stonewall, Man.

♦

The sympathy of the Executive and Members of the Manitoba Medical Association is extended to Dr. A. E. Deacon on the loss of his mother, who died April 17th, 1945.

♦

Surgeon Commander C. W. MacCharles, R.C.N.V.R., and Mrs. MacCharles spent a short leave visiting friends in Winnipeg and Kenora before proceeding to the West Coast.

Dr. D. G. Ross, of Selkirk, Man., has retired from active practice and is leaving Selkirk to reside in Winnipeg.

♦

Major Albert S. Rumble, R.C.A.M.C. (Overseas), of Brandon, Man., has been promoted to the rank of Lieutenant-Colonel.

♦

Captain M. J. Ranosky, R.C.A.M.C. (Overseas), and Mrs. Ranosky are celebrating the birth of a daughter (Janis) on April 26th, 1945, at St. Boniface Hospital.

♦

The Manitoba Medical Association, Executive and Members, desire to express their sympathy to Drs. R. Rennie and Alex. J. Swan on the death of their mother, who died April 6th, 1945, at Greenock, Scotland.

♦

Dr. Alice E. Loadman is now associated with Dr. O. T. Day, at 90 Roslyn Road, Winnipeg.

♦

Dr. A. G. Henderson, formerly a prisoner of war in Germany, is now associated with the Winnipeg Clinic.

Professional Topics

"So What Will the Doctor Think Now?"

(A correspondent who prefers to remain anonymous sends us the following. The "Black Ink" referred to is Hammond's Mixture.)

Dear Doctor:

Here is Mrs. I which was in Saint Boniface hospital. for examination. and Xary. And I am useing those treatments assed. And that black ink. which Dr. prescribe. its two months since I am useing it. but I still don't feel any different. is that medecine working so slow? or Maybe I am not taking the right kind of treatments? So here is how I feel yet. I am all ways feeling so tired. No strangth. to do my house work even. I sweat alout. And I often feel cheally & cold, and I get aking arms, hips albows & feet and stiff fingers. I cant stand cold at all. And about my stomack its still as bad. it all ways gets full of gas or air. it seems to get worst gassy when I am tired. or hongry. and it makes my feet and hands so tired. make me feel kind a sleepy, or some time dizzy so I have to set down. and press with my hands to bring up the gas. so it comes up like from the barral. so loud some times. and sometimes it doesnt want to come up. and when my stomack is full of air is its all way quaking so loud when I press with my hand. or even like that but it dosent relief the gas just for a few minuts. and then it comes on again. Well so what will the Doctor think now. May be I am not taking the right kind of medicine and I am still on a diet. with out no meat or nothing sour or fried or pastry I still don't care for those things. So what do the doctor think do I still have to use that black ink or will the doctor prescribe me something better, I hope so. Please.

So send the treatment on C.O.D. and write me the prize of it. or phone the drug store. and he will send out on C.O.D. and how long do I have to use. Answer soon.

Thinking you kindly. I remain.

♦

Dear ————

Was today consulted by Mrs. M. ———— of ————. She saw you approximately 15/11/43. Having also been attended by (here are named two clinics and five individual doctors) she finally decided that a really brilliant intellect was indicated and wisely dropped in. Would greatly appreciate learning of your findings as it appears the above battery of High Powered talent, in their enthusiasm of referring her to other doctors, forgot to tell her the diagnosis and prognosis and forgot to cure her—such are the mental lapses incident to the profession of Winnipeg.

Thanking you in anticipation and kindest personal regards.

Yours truly,

Department of Health and Public Welfare

Comparisons Communicable Diseases — Manitoba (Whites and Indians)

DISEASES	1945 Feb. 25 to Mar. 24	1945 Jan. 29 to Feb. 24	1944 Feb. 27 to Mar. 25	1944 Jan. 30 to Feb. 26	TOTALS Jan. 1 to Mar. 24,'45	TOTALS Jan. 1 to Mar. 25,'44
Anterior Poliomyelitis	----	1	1	----	2	1
Chickenpox	197	201	304	248	669	890
Diphtheria	30	43	16	10	100	35
Diphtheria Carriers	3	9	4	3	19	11
Dysentery—Amoebic	----	----	----	----	----	----
Dysentery—Bacillary	----	----	----	----	1	----
Erysipelas	8	3	8	8	16	23
Encephalitis	1	1	----	2	2	2
Influenza	3	14	45	33	38	142
Measles	26	65	797	271	141	1,185
Measles—German	1	3	70	51	8	128
Meningococcal Meningitis	1	3	1	2	6	6
Mumps	226	172	351	348	466	897
Ophthalmia Neonatorum	----	----	----	----	----	----
Pneumonia—Lobar	2	6	20	25	19	70
Puerperal Fever	----	----	1	1	----	2
Scarlet Fever	90	94	346	279	243	893
Septic Sore Throat	2	3	5	3	6	10
Smallpox	----	----	----	----	----	----
Tetanus	----	----	----	----	----	----
Trachoma	----	----	----	----	----	----
Tuberculosis	45	51	60	53	112	138
Typhoid Fever	1	17	4	----	20	4
Typhoid Paratyphoid	----	2	----	----	2	----
Typhoid Carriers	1	----	----	----	1	----
Undulant Fever	----	----	----	1	1	1
Whooping Cough	15	39	43	29	93	106
Gonorrhoea	163	125	93	161	405	393
Syphilis	45	65	55	42	152	145
Actinomycosis	----	----	1	----	----	1

DISEASES *Approximate Populations.	*726,000 Manitoba	*3,825,000 Ontario	*906,000 Saskatchewan	*2,972,300 Minnesota	*641,935 North Dakota
Anterior Poliomyelitis	----	----	----	1	----
Chickenpox	197	1,077	121	----	146
Diphtheria	30	9	32	15	7
Diphtheria Carriers	3	----	2	----	----
Dysentery—Amoebic	----	3	----	9	----
Bacillary	----	----	----	1	----
Encephalitis, Epidemica	1	----	----	1	4
Erysipelas	8	10	1	----	3
Influenza	3	463	6	6	55
Jaundice—Infectious	----	7	----	----	----
Measles	26	341	93	41	14
Measles—German	1	54	14	----	----
Meningococcal Meningitis	1	12	----	11	3
Mumps	226	721	129	----	----
Ophthalmia Neonatorum	----	----	----	----	----
Puerperal Fever	----	----	----	----	----
Scarlet Fever	90	395	47	441	127
Septic Sore Throat	2	----	----	----	----
Smallpox	----	----	----	----	1
Trachoma	----	----	----	----	2
Tuberculosis	38	177	49	10	22
Typhoid Fever	1	4	1	----	----
Typhoid Paratyphoid Fever	----	2	4	----	----
Typhoid Fever Carriers	1	----	----	----	----
Undulant Fever	----	6	5	14	1
Whooping Cough	15	253	32	95	3
Gonorrhoea	163	580	----	----	35
Syphilis	45	419	----	----	21

There is very little on which to comment in the morbidity report for the four-week period February 25th to March 24th, 1945. Most of the communicable diseases show little or no variation from their usual figures.

Diphtheria morbidity is high in Manitoba and Saskatchewan. The strain of bacillus is of a virulent type in Manitoba and is causing a fairly high case fatality rate. Spring is upon us and plans should be made now for immunization clinics before summer vacation interferes. Smallpox, diphtheria and whooping cough should all be borne in mind.

Department of Health and Public Welfare
For Your Information

Standard Nomenclature of Diseases and Operations

The Report on "Hospitals in Manitoba" released last autumn had so many worthwhile features that one minor but potentially mighty recommendation has received but little outside notice. That was the recommendation that the "Standard Nomenclature of Diseases and Operations" be adopted by the Manitoba Hospital Council and that it be compulsory for all hospitals. If adopted, this recommendation will make Manitoba the first province to take this forward step.

Already the Canadian Hospital Council and the Canadian Medical Association have approved this nomenclature which was developed some thirteen years ago by a joint committee representing the leading national medical, hospital and public health organizations in the United States. The primary purpose was to end once and for all the confusion in medical literature resulting from a multiplicity of terms and filing methods for the same clinical entity. Most physicians use terms drawn from several nomenclatures, frequently in the same article or address. The "Standard Nomenclature" lends itself unusually well to intelligent filing, as listing is based on **cause** as well as site. Already most of the leading hospitals on this continent have adopted the Standard system and initial steps have been taken towards its adoption abroad. As time goes on students and interns trained in the use of these terms will become the lecturers and the writers of books for the next generation, thus further clarifying the picture.

The question has been raised, "How can smaller hospitals comply with an official nomenclature?" Obviously the problem differs from that in larger hospitals. The guide book does seem a bit complicated at first, partly because of the use of figures for numerical indexing; the system, however, permits varying degrees of simplification. Methods of condensation and simplification have been developed primarily for the smaller hospitals. Basic titles have been selected as a guide in this simplification. No new or expensive equipment is required; however, it is essential to have cards adapted for Standard filing. The Canadian Association of Medical Record Librarians, through its bulletin and at its conventions, has done much to promote a better knowledge of this system.

If there is a full or part time medical record librarian, it would be advisable to arrange for her to take a course in the use of the Standard System. In the case of Manitoba it is hoped that the Government will be able to arrange intensive courses for the training of part-time or full-time librarians in this method. This would be a great help. Of course, for the proper training of a medical record librarian a full course of at least one year is generally considered essential. At the present time, however, we believe that there is only one hospital in Canada conducting a school of this nature and that is St. Michael's Hospital in Toronto.

For a time the busy medical man is likely to continue using the terms to which he has become accustomed in recording operations or entering diagnosis or discharge. For filing purposes the librarian should be authorized to translate these if necessary into "Standard" terminology. For instance "peptic ulcer" would become "640-951 ulcer of the stomach" or "651-951 duodenal ulcer." To do this intelligently it will be necessary to have information respecting both site and cause, but the result is worth the effort. Gradually the use of approved terms and appreciation of the filing methods will develop, particularly as younger men trained in the method during their internship days join the staff.

Hospitals too small to employ a librarian will have more difficulty. A member of the medical staff should be named as chairman of the medical records committee and in very small hospitals he may need to take considerable personal responsibility in setting up a satisfactory records system. However, if at all possible, some person on the hospital staff interested in that type of work — the bookkeeper, for instance, a Sister or a graduate nurse—should be assigned to this work on a part-time basis, preferably after a period of training.

Recent Accessions to the Medical Library

British Journal of Surgery: Special issue to v. 32: Penicillin in warfare. Bristol, Wright, 1944, pp. 110-224.

Cameron, A. T.: Recent Advances in Endocrinology; 5th ed. London, Churchill, 1945, 415 p.

Comroe, B. I.: Arthritis and Allied Conditions; 3rd ed., enl. and thoroughly rev. Phil., Lea & Febiger, 1944, 1,359 p.

Critchley, M.: Shipwreck Survivors, A. Medical Study. London, Churchill, 1943, 119 p.

Greenblatt, R. J.: Office Endocrinology; 2nd ed. Springfield, Ill., Thomas, 1944, 243 p.

Hemblen, E. C.: Endocrinology of Woman. Springfield, Ill., Thomas, 1945, 571 p.

Johnson & Johnson: Operative Procedure. New Brunswick, N.J., Ethicon Suture Laboratories, Division of Johnson & Johnson, 1943, 126 p. (Presented)

Langdale-Kelham, R. D., & Perkins, G.: Amputations and Artificial Limbs. London, H. Milford, 1942, 96 p. (Presented)

London, Royal Northern Hospital: Royal Northern Operative Surgery, by the Surgical Staff of the Royal Northern Hospital. London, Lewis, 1939, 551 p. (Presented)

Mercer, W.: Orthopaedic Surgery; 3rd ed. London, E. Arnold, 1943, 947 p. (Presented)

Medical Events for May

Hospital Luncheons

Tues., 1st, 12:30, Grace Hospital.
Tues., 1st, 12:30, Misericordia Hospital.
Thurs., 3rd, 12:30, Winnipeg General Hospital.
Thurs., 10th, 12:30, St. Boniface Hospital .
Thurs., 17th, 12:30, Winnipeg General Hospital.
Tues., 22nd, 2:30, St. Joseph's Hospital.
Thurs., 24th, 12:30, St. Boniface Hospital.
Friday, 25th, Victoria Hospital.

Tumour Clinics

Winnipeg General Hospital, every Wednesday at 9:00 a.m.

St. Boniface Hospital, every Friday at 10 a.m.

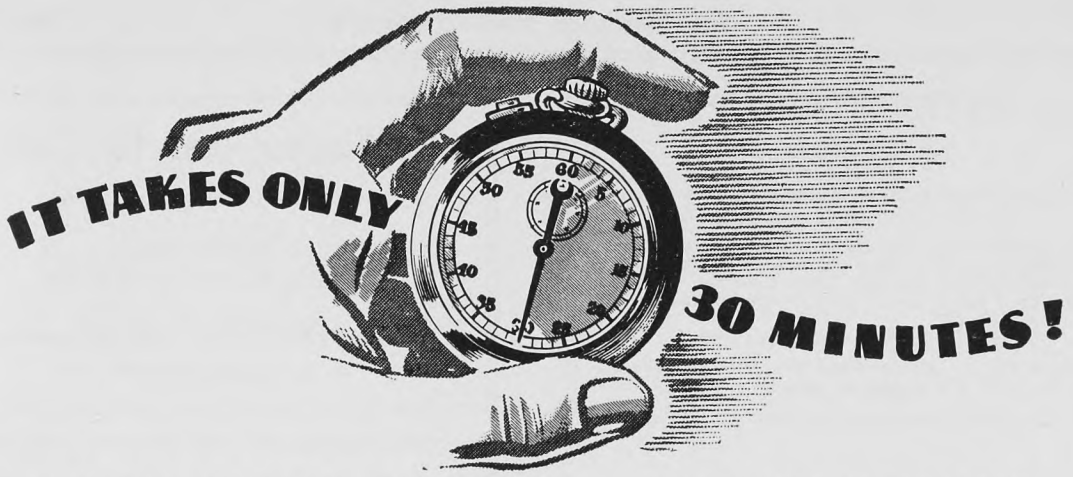
Winnipeg Medical Society

Friday, 18th, 8:15 p.m., Medical College.

♦

Locum Tenens Service

Dr. W. G. Newman, who has just been discharged from the Army, is prepared to give locum tenens service to doctors planning to take holidays. Phone 92 068.



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FOR COMPLETE TREATMENT

Adult requires 5 to 6 fl. oz.
Child requires 2 to 3 fl. oz. See
← our Catalogue, Page 33.

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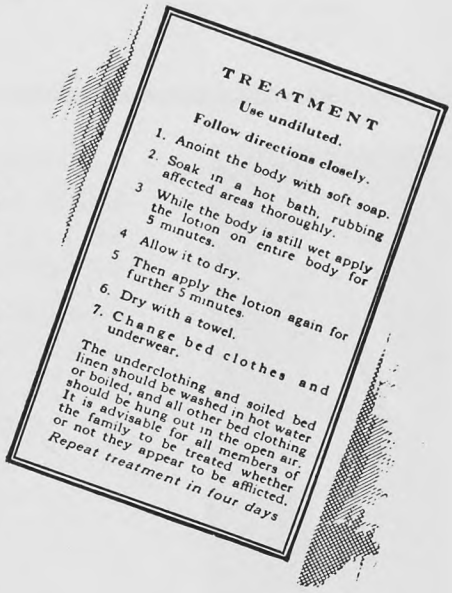
Please write us for complete treatment clinical package. It is complimentary.


TREATMENT

Use undiluted.

Follow directions closely.

1. Anoint the body with soft soap.
2. Soak in a hot bath, rubbing affected areas thoroughly.
3. While the body is still wet apply the lotion on entire body for 5 minutes.
4. Allow it to dry.
5. Then apply the lotion again for further 5 minutes.
6. Dry with a towel.
7. Change bed clothes and underwear.

The underclothing and soiled bed linen should be washed in hot water or boiled, and all other bed clothing should be hung out in the open air. It is advisable for all members of the family to be treated whether or not they appear to be afflicted. Repeat treatment in four days

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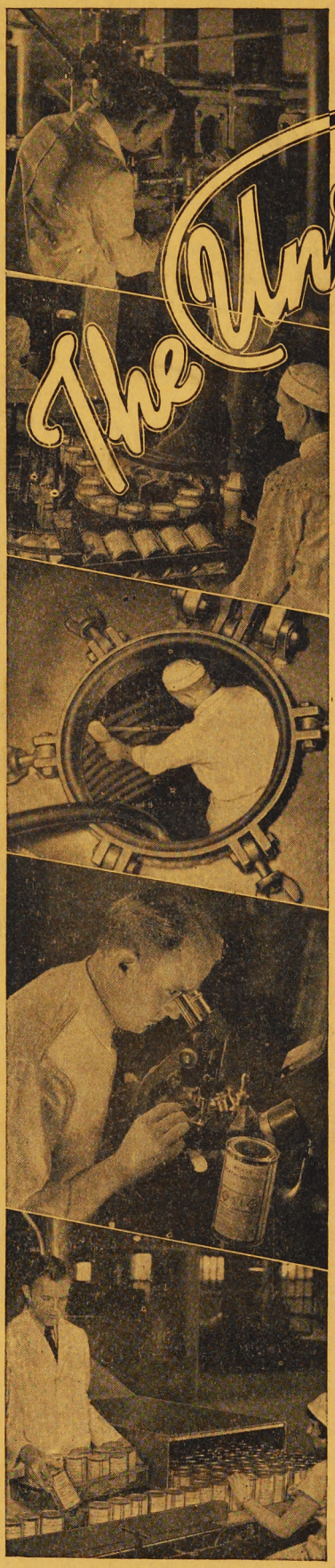

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